



# DISCLAIMER

It is illegal to mold a commercial item  
and then sell the castings

You can, however,

- Mold a commercial item and cast it for your own use
- Make your own masters, cast it and use or sell them

# Molding and Casting Parts



Alumilite



Smooth-On



## Molding and Casting Parts

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Larry



This stuff can even be used for "Life casting"

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..did Duane to



Here's Larry's casting



...and Mike

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What can you mold and cast?

2-Part  
mold  
items



Just about anything!



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Some items can be molded  
in a single mold...



...Others require a  
2-part mold

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We'll start with the simpler 1-part mold



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We'll use the car for this clinic



# Molding and Casting Parts

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We'll use the car for this clinic



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Start by preparing the master for molding  
In this case, removing the wheels



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Then fill any void with modeling clay

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Next we shape any exposed areas  
to shape the final master

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To build a box to contain the mold  
First measure the height, width, and length of the master



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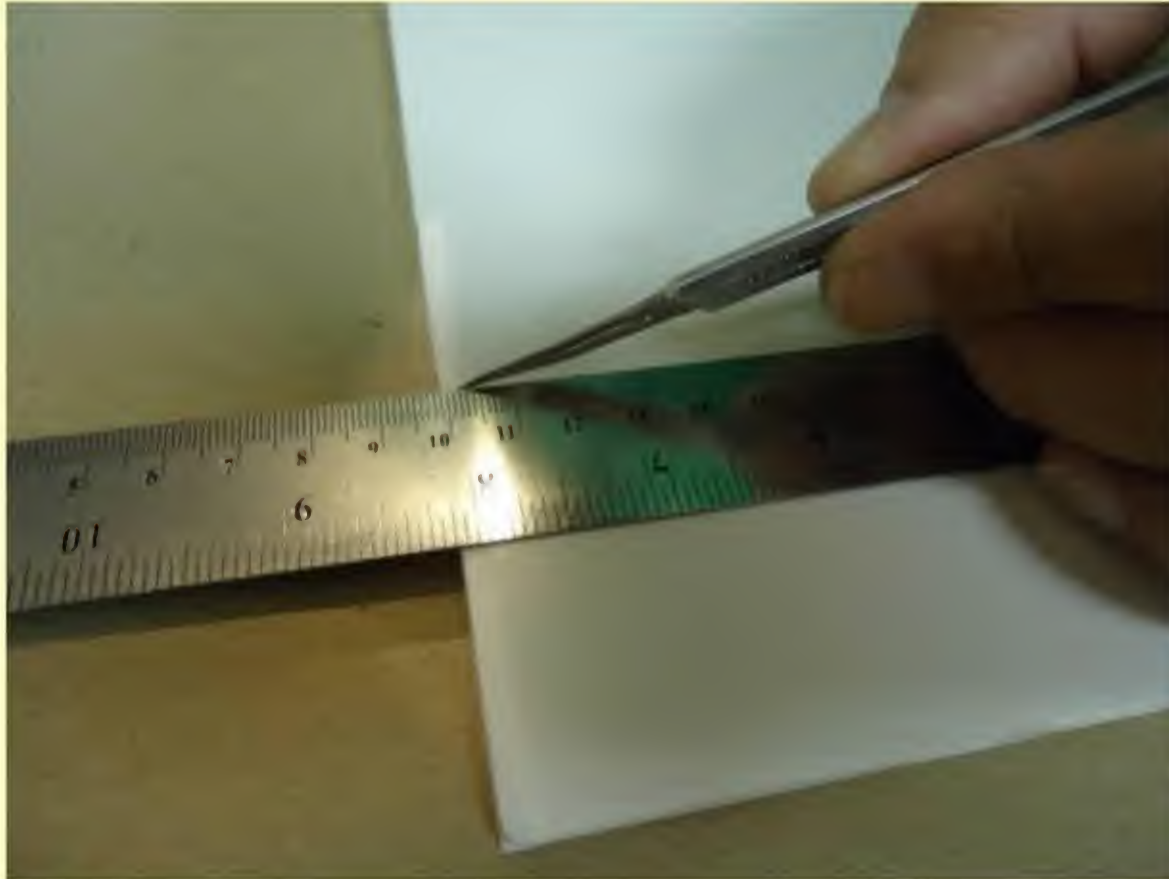
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We'll make the box  
 $\frac{1}{2}$ " longer,  $\frac{1}{2}$ " wider,  $\frac{1}{4}$ " higher  
than the master

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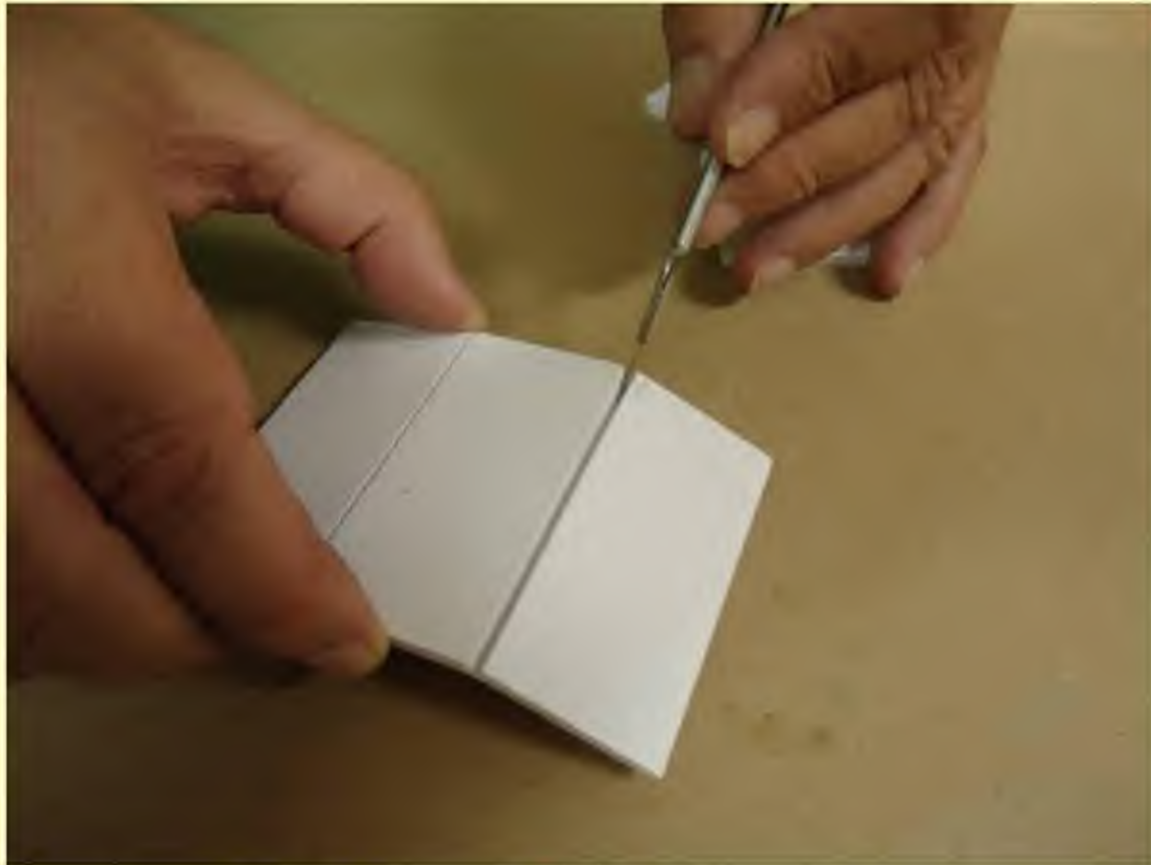
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This gives us a  $\frac{1}{4}$ " rubber layer  
all around the master

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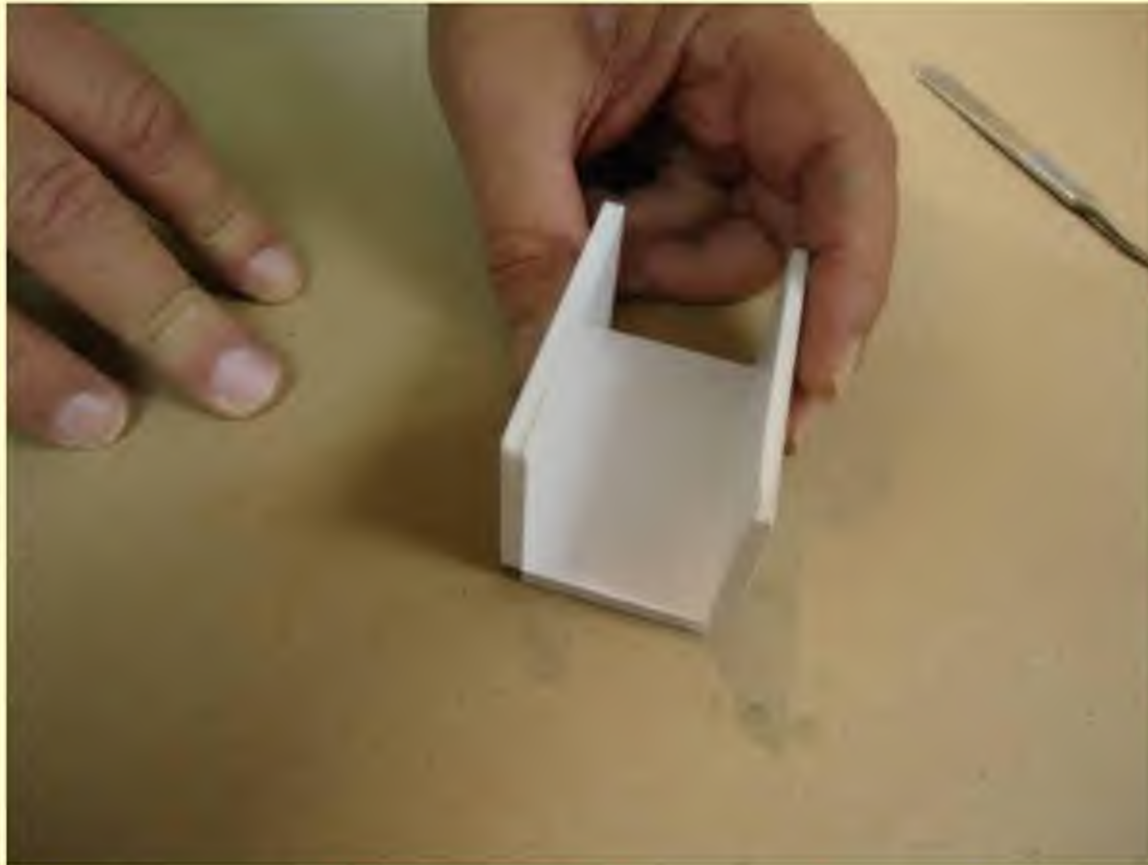


Cut a bottom, 2 sides, and 2 ends



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If you don't cut all the way through  
you can fold up the sides

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Attach an end piece using tape  
align the tape along the top of the box  
and allow it to extend past the bottom

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When you're done it will look like this



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Now slit the tape in the corners and...

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Fold the flaps of tape over  
to seal the bottom joints

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It's time to put the master  
into the molding box



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After applying a little dab of glue  
place the master in position

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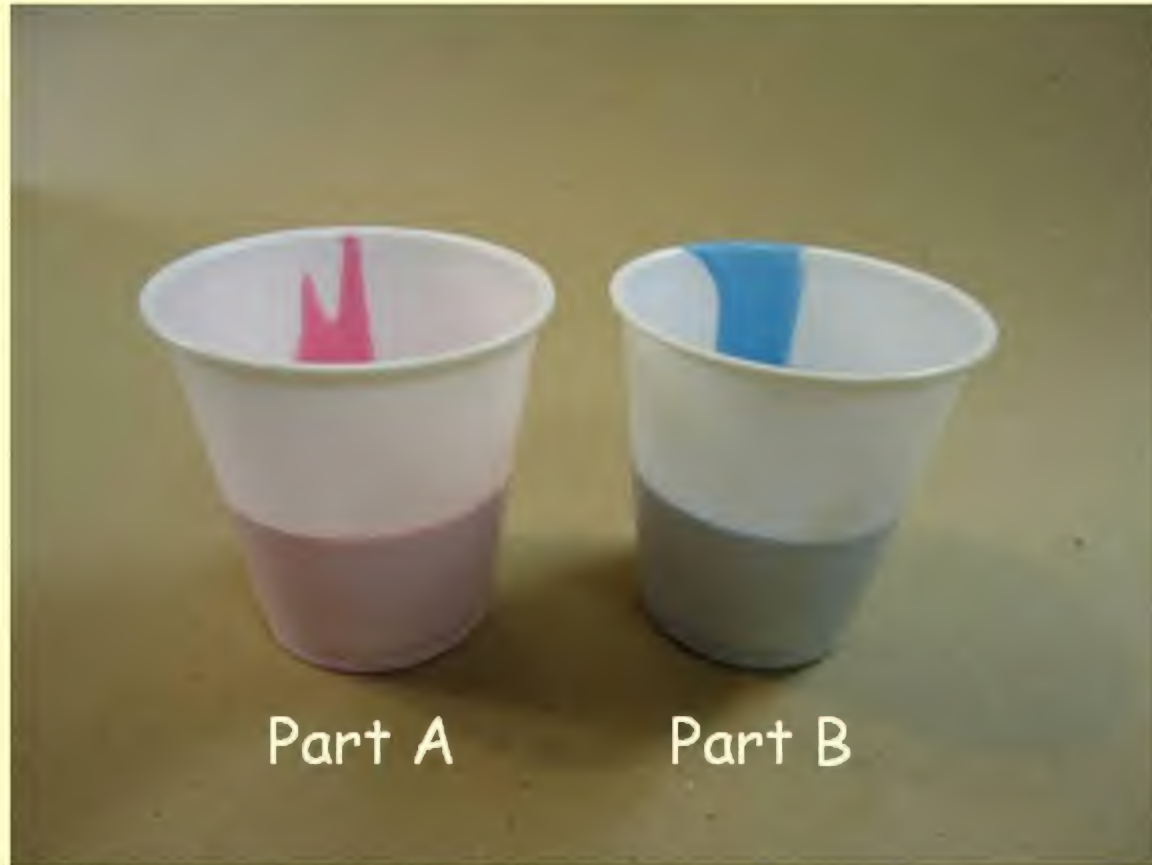
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Gather the supplies

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Measure out equal parts



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Since Part A is thicker,  
we'll start by scraping all of it into our mixing bowl

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Then add in all of Part B

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Start mixing thoroughly but try to minimize the introduction of bubbles into the mixture



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Mix to a uniform color with no streaks  
You will have a 30-minute pot life

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Start applying the rubber by painting the master with a thin coating

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Cover the master completely  
This helps eliminate voids in the mold



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Then simply pour more rubber on top until you cover the master with  $\frac{1}{4}$ " of rubber

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Some bubbles will exist and need to be brought to the surface

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You can tap on the box to cause a vibration and force bubbles to the top

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...or tap the box on the work surface



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... or, if you're really adventurous,...

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Now you just let it cure  
OOMOO-30 will take about 6 hours

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Now for your homework!



Once cured, cleanup is easy

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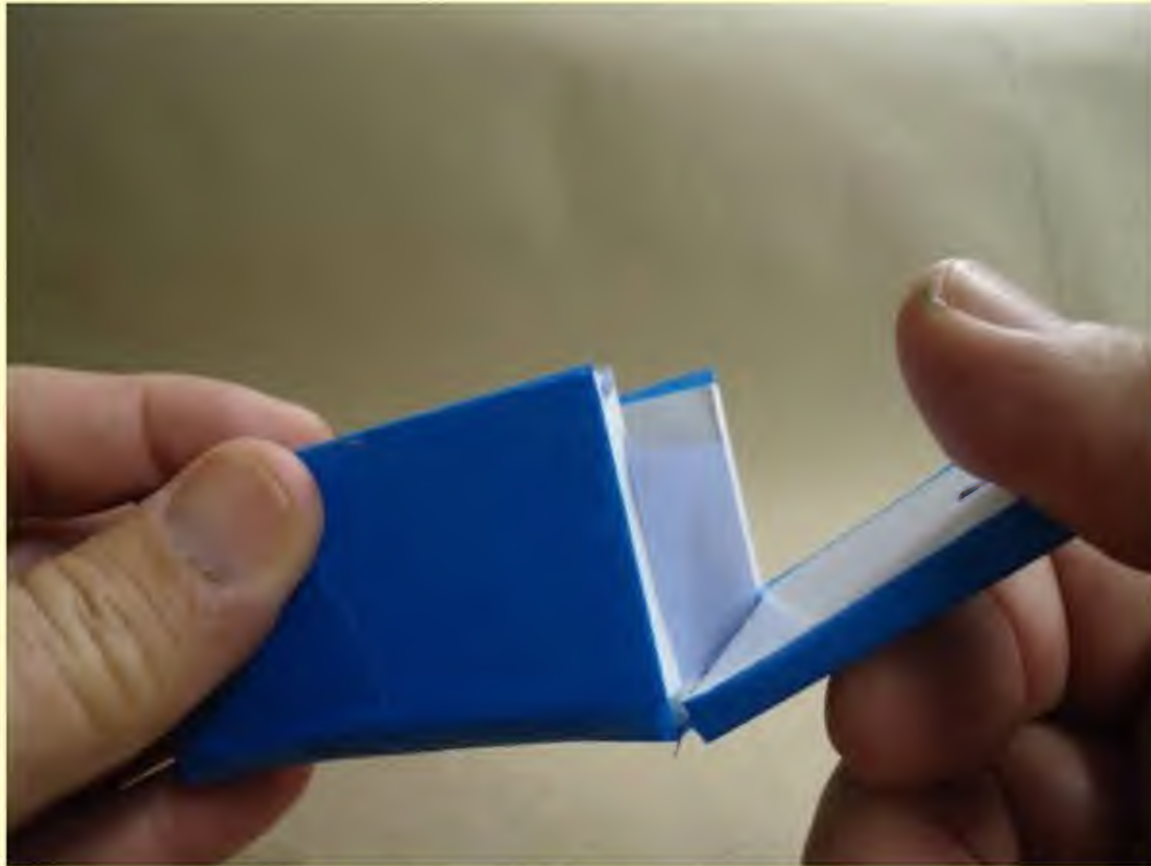


After the rubber has cured (maybe even wait until tomorrow)  
Take a knife and slit the tape along the seams of the box



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Pull back the ends

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...and the sides

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Then remove the box completely  
Save the box it's reusable!

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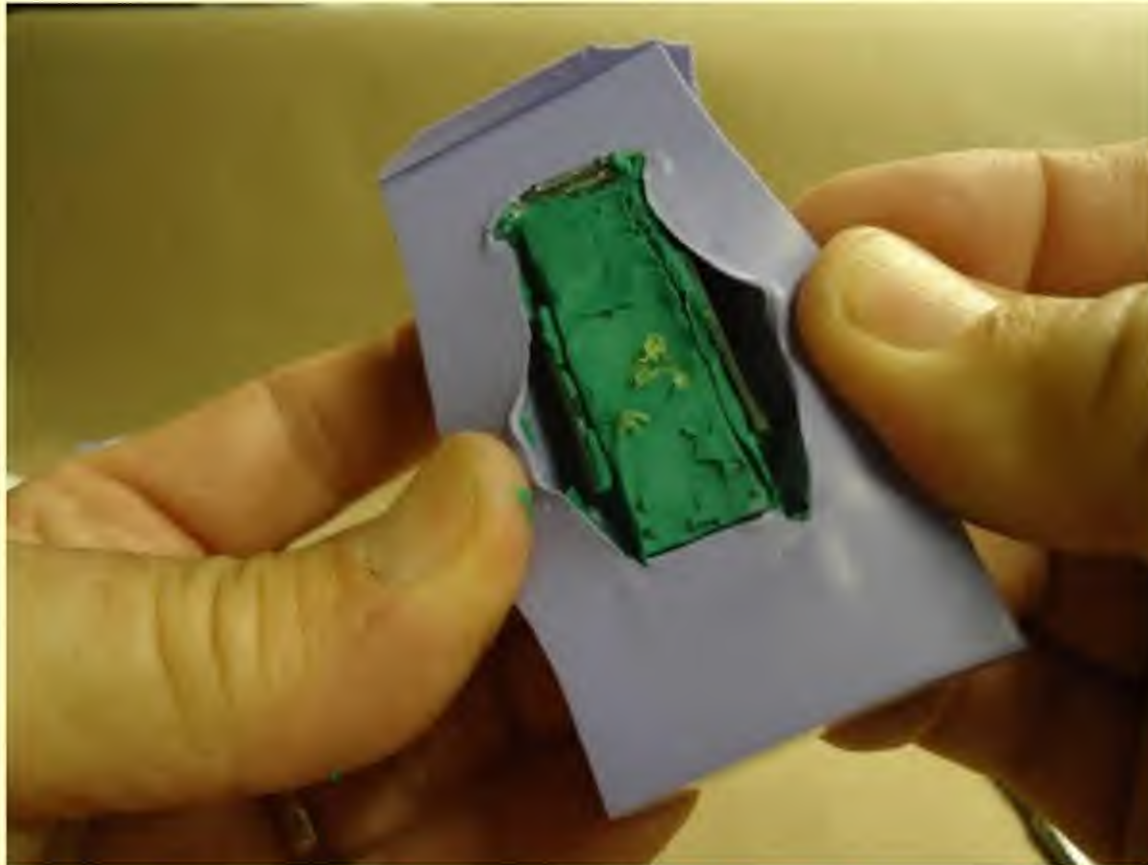


If your master has floated  
you will need to cut along the outline of it  
and remove the rubber on the bottom



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Then loosen the rubber from  
the master on all 4 sides

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...and remove the master

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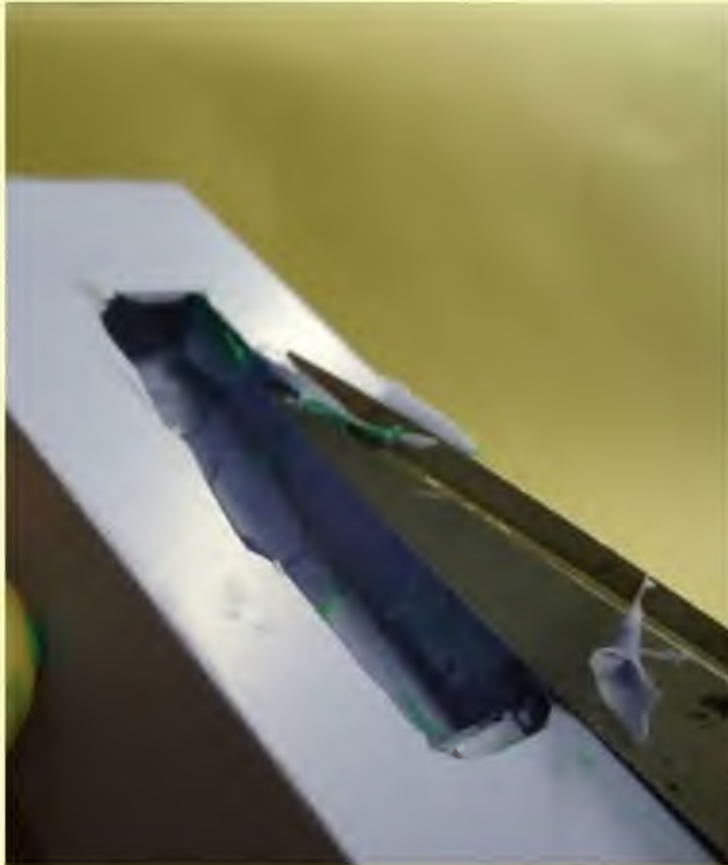


There will be some flash that will have to be removed



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You can use a small pair of scissors and/or a hobby knife



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Here's our trimmed mold

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Don't forget to remove the clay and restore the master to its original condition

